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REMARKS

Claims 1-20 are pending in the present Application. Claims 1-20 were subject to the following restriction requirement: Group I claims 1-15 and Group II claims 16-20. Claims 61-20 are withdrawn, Claim 13 has been canceled, Claims 1 and 10 have been amended, and no claims have been added, leaving Claims 1-12 and 14-15 for consideration upon entry of the present Amendment.

No new matter has been introduced by these amendments. Support for the amendments is found throughout the Specification beginning at least at page 2, [0022], [0024], [0026] and [0032]. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Restriction Requirement

In response to the restriction requirement, Applicants hereby affirm the election of Group I without traverse. However, this election is being made without prejudice to Applicants' rights with respect to claims 16-20, including the right to file divisional applications thereon.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-2, 10 and 13 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent Application Publication No. 2002/0102192 A1 to Ward (hereinafter "Ward"). Applicants respectfully traverse this rejection.

The present disclosure and claims are directed to an inlet device for a reactor, the inlet device comprising a frustoconical interior region containing a plurality of chemically inert particles. The inlet device provides for the passage of fluid into and out of the frustoconical interior region and subsequently to the reactor.

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In contrast, Ward discloses an axial/radial-or radial/flow catalytic reactor having cylindrical or frusto-conical free-space and/or catalyst bed round a central region of the reactor. (see Ward, Abstract, [0014]) Nothing in Ward discloses or teaches an inlet device having a frustoconical interior region containing chemically inert particles. Applicants' inlet device provides for a flow of fluid to the catalytic reactor.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Applicants respectfully submit that Ward cannot anticipate the present claims because Ward does not disclose an inlet device having a frustoconical interior region containing a plurality of chemically inert particles. Applicants respectfully submit that the frustoconical interior region of the inlet device as claimed are separate and distinct from a frustoconical free space and/or catalyst bed of a catalytic reactor disclosed in Ward.

With regard to Claim 13, the rejection has been rendered moot in view of the cancellation thereof.

Therefore, it is respectfully submitted that claims 1, 2, and 10 are allowable over Ward. Removal of the rejection and allowance of the claims is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

A. Claims 3-4 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent Application Publication No. 2002/0102192 A1 to Ward ("Ward"), as applied to claim 1 above. Applicants respectfully traverse the rejection.

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Ward is generally directed to an axial/radial-or radial/flow catalytic reactor having a frustoconical free space and/or catalyst bed and is directed to achieving a measurable pressure drop. (Ward, p. 3, [0035])

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Further, even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by themselves and not in retrospect, must suggest the invention. *In Re Skoll*, 187 U.S.P.Q. 481 (C.C.P.A. 1975).

Applicants respectfully assert that prima facie case of obviousness has not been established against Claims 1-2, 10 and 13 because the cited reference fails to teach or suggest an inlet device comprising, *inter alia*, a frustoconical interior region containing a plurality of chemically inert particles as disclosed and claimed in the present Application. There is nothing in Ward that teaches or suggests the inlet device, much less any parameters with respect to areas within an inlet device. As noted above, Ward is directed to a catalytic reactor and fails to teach or suggest an inlet device of the type claimed by the Applicants that is fluidly coupled to its catalytic reaction surface. Having a frustoconical interior region within the catalytic reactor is not the same as Applicants' inlet device having a frustoconical interior region containing a plurality of chemically inert particles. Applicants' claimed inlet device and the catalytic reactor provided by Ward are markedly different in terms of form, function and structure. As noted in Applicants' disclosure, the inlet device advantageously provides homogeneous fluid

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material to the reactor, which provides uniform distribution of fluid material to the catalyst, thereby providing greater thermal efficiency. (Specification, p. 2, [0019])

In view of the foregoing, Applicants respectfully request removal of the rejection and allowance of Claims 3 and 4.

B. Claims 5-6 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Ward, as applied to claim 1, and further in view of U.S. Patent 5,916,529 to Scheuerman (hereinafter "Scheuerman"). Applicants respectfully traverse the rejection.

Ward is discussed above.

Scheuerman is generally directed to a method and reactor for hydroprocessing hydrocarbon feed stream through a multistage moving catalyst bed. (Abstract)

Scheuerman fails to compensate for the deficiencies in Ward. The cited references, individually or in combination, fail to teach or suggest an inlet device comprising, *inter alia*, a plurality of chemically inert particles contained within a frustoconical interior region as claimed by Applicants.

Therefore, Applicants respectfully request removal of the rejection and allowance of Claims 5-6.

C. Claims 7-8 and 11-12 are rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Ward, as applied to claims 1 and 10 above, and further in view of U.S. Patent Publication No. 2004/0120847 A1 to Dijkhuizen (hereinafter "Dijkhuizen"). Applicants respectfully traverse the rejection.

Ward is discussed above.

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Dijkhuizen is generally directed to methods of decreasing corrosivity of a water-containing crude oil mixture, e.g., in a pipeline system or oil tanker (Dijkhuizen [0008], [0028]).

For reasons previously discussed, Ward fails to teach or suggest a plurality of chemically inert particles contained within a frustoconical interior as claimed by Applicants. Dijkhuizen fails to compensate for the deficiencies in Ward. There is no disclosure or suggestion of an inlet device in Dijkhuizen.

Therefore, Applicants respectfully request removal of the rejection and allowance of Claims 7-8 and 11-12.

D. Claims 9 and 14-15 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Ward, as applied to claims 1 and 10 above, and further in view of U.S. Application Publication No. 2003/0159354 A1 to Edlund et al. (hereinafter "Edlund"). Applicants respectfully traverse the rejection.

Ward is discussed above.

Edlund is generally directed to a fuel processing system, however nothing in Edlund teaches or suggests an inlet device as claimed.

Neither Edlund nor Ward, either alone or in combination, discloses, teaches or suggests an inlet device comprising a plurality of chemically inert particles contained in a frustoconical interior as claimed by the Applicants.

Applicants respectfully request removal of the rejection and allowance of Claims 9 and 14-15.

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It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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